

# Unveiling Commvault's Secret Storage Sauce

## Challenge Summary

Commvault's data backup component, the Commvault Media Agent, is deployed in a variety of configurations and capacities—making efficient, high-performance, flexible storage systems critical.

## Benefits Summary

- Certified for Commvault's Windows Server
- Certified for VMware ESXi
- Efficient, dense storage systems requiring lower power and less rack space
- Low-cost storage platform to build upon for Windows Server
- High performance, scalability, and built-in data protection

Commvault is a giant in the world of backup applications—and they're turning to Seagate for easy, efficient, flexible storage systems.

Seagate® storage systems have been certified as primary data storage solutions for Windows Servers, providing an efficient, low-cost platform that the Commvault Media Agent can build upon in the back end. These systems ensure high performance, scalability, and built-in protection.

## The Need for Powerful Enterprise Storage

Commvault, one of the most pervasive backup applications on the market today, features several components which make up the Commvault software suite—and many run on the Microsoft Windows Server operating system. One component in particular, the Commvault Media Agent, is responsible for keeping all of Commvault's

backup data. Therefore, it requires efficient, flexible, high-performance data storage to support a variety of scenarios, capacity demands, and performance needs.

## The Seagate Solution

Seagate offers a variety of SAN (storage area network) and DAS (direct-attached storage) enterprise storage systems that are ideal solutions for the Commvault Media Agent's primary and archive storage, delivering high performance,

scalability, and built-in data protection. Available from selected distributors worldwide, they feature a variety of Seagate's enterprise nearline capacity-optimized hard drives and high-performance SSDs pre-integrated.



**The Seagate Nytro® E 2U24** system is a high-performance SAS-based all-flash array that supports up to 24 SSDs and provides throughput of 28.8GB/s with dual 12Gb/s SAS controllers for maximum throughput and expansion to up to 16 enclosures and up to 384 drives.



**The Seagate Nytro X** features SAN controllers (3005, 4005, and 5005) that use Seagate's proven RAID and erasure coding ASICs and Seagate ADAPT (Autonomic Distributed Allocation Protection Technology) next-gen erasure coding technology to enable rebuilds that are up to 95% faster than traditional solutions. As capacity grows, rebuild times can be cut from many hours or days to minutes using ADAPT. These controllers also provide thin provisioning, snapshots, asynchronous replication, and allow capacity expansion beyond the chassis by adding Seagate's optional expansion disk arrays (EBODs).



**The Seagate Exos® X** system series offers families of 2U and 5U form-factor chassis using one of Seagate's hardware RAID controllers, enabling Fibre Channel or iSCSI SAN solutions. These capacity-optimized disk and hybrid disk/flash SAN arrays enable up to 84 drives and 1.3PB of raw data storage with integrated Seagate hardware-based data protection using RAID and Seagate ADAPT erasure coding technology.



**The Seagate Exos E** system series offers families of 2U and 5U form-factor chassis with high-performance interfaces to enable DAS for JBOD (just a bunch of disks) server-attached solutions. These disk and hybrid disk/flash DAS JBODs in 2U and 5U form factors support up to 84 drives and 1.3PB of raw data storage with a 12Gb/s SAS interface for up to 28.8GB/s throughput in a dual controller configuration.

All of Seagate's enterprise storage systems are built for demanding data centers and include active-active redundant components (hot-standby spare) with automatic failover and redundant hot-swap of key components. Enterprise system management features ensure they're simple to maintain while

Seagate's patented AcousticShield™ technology in certain models enables maximum performance from every drive. Additionally, they've been certified by VMware as primary data storage solutions for their popular ESXi server software, offering an efficient, low-cost storage platform to build upon.



## Seagate Drive and System Benefits

All system components—enclosure, controller, firmware, and drives—are developed and optimized by Seagate engineers to work together seamlessly. This reduces support calls and eliminates

technical learning curves. Our modular architecture makes components interchangeable between systems, and upgrades are simple due to common FRUs, PCMs, controllers, and software.

- VSS hardware provider for Seagate enables Windows shadow copies and snapshot creation via third party backup applications
- Cost-effective JBOD-SAS models
- High-performance, flexible connectivity options for any VMware environment with SAS, iSCSI, and Fibre Channel
- High-density solutions built for modern data center or server closet
- Unfettered data access with dual-redundant controllers capable of achieving up to 7GB/s sequential read, 5.5GB/s sequential write performance
- Seamless data center scalability with single enclosures that host up to 1.3PB of data
- Thin provisioning saves on storage costs by dedicating storage only when needed
- Virtual storage pools streamline management
- Improved performance for read-intensive workloads while minimizing SSD cost
- SED- and FIPS-capable devices extend data security with array-based data-at-rest encryption
- Auto tiering (with optional software bundle) accelerates performance with SSDs while providing the cost and capacity benefits of HDD
- Snapshots (with optional software bundle) reduces RPO and RTO with efficient, block-based hardware snapshots
- Asynchronous replication (with optional software bundle) replicates data between arrays for business continuity and disaster recovery
- Easy setup, maintenance, and expansion

### Why Seagate ADAPT Makes a Difference

Seagate ADAPT data protection, a form of distributed parity RAID, enables faster-than-ever drive rebuilding.

- Automatic rebalancing of stripe health (REFT) allows more drive failure protection
- Avoids idle spare drives (all drives provide performance and spare capacity is distributed evenly)
- Allows mixed drive sizes and easy capacity expansion
- Supports from 12 up to 128 drives per disk group
- Works with SSD and HDD groups



## Certification Is Underway

Commvault certification is in process and expected to be complete by June 2020. Seagate systems have been certified with both Windows Server and VMware ESXi, which are very often used together with Commvault.

**Windows Server versions tested with Seagate systems:** 2008, 2008 R2, 2012, 2012 R2, 2016, 2019

**VMware ESXi versions tested and certified with Seagate systems:** 7.0, 6.7 U3, 6.7 U2, 6.7 U1, 6.7, 6.5 U3, 6.5 U2, 6.5 U1, 6.5, 6.0 U3, 6.0 U2, 6.0 U1, 6.0, 5.5 U3, 5.5 U2, 5.5 U1, 5.5



Ready to  
Learn More?

For more information on Seagate Exos Systems, visit:

[www.seagate.com/enterprise-storage/systems/exos](http://www.seagate.com/enterprise-storage/systems/exos)

For more information on Seagate Nytro Systems, visit:

[www.seagate.com/enterprise-storage/systems/nytro](http://www.seagate.com/enterprise-storage/systems/nytro)

## In Conclusion

Seagate systems provide high-performance, scalable storage to Windows Servers, ensuring the Commvault Media Agent can do its job: storing important data

efficiently and securely. For the most up-to-date list of supported Seagate models, visit the Microsoft Windows Server Catalog:

[www.windowsservercatalog.com/results.aspx?&text=seagate&bCatID=1511&cpID=24239](http://www.windowsservercatalog.com/results.aspx?&text=seagate&bCatID=1511&cpID=24239)

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